



May 27, 2016

Public Health Preparedness and Situational Awareness Report: #2016:20 Reporting for the week ending 5/21/16 (MMWR Week #20)

CURRENT HOMELAND SECURITY THREAT LEVELS

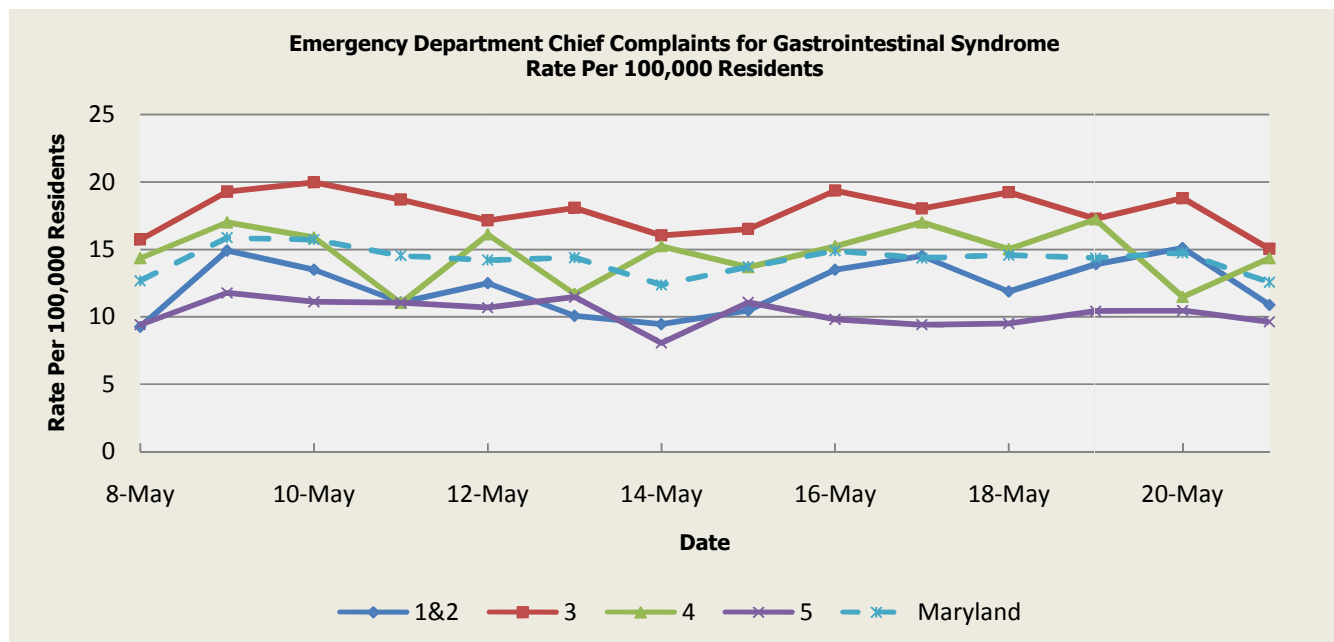
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.

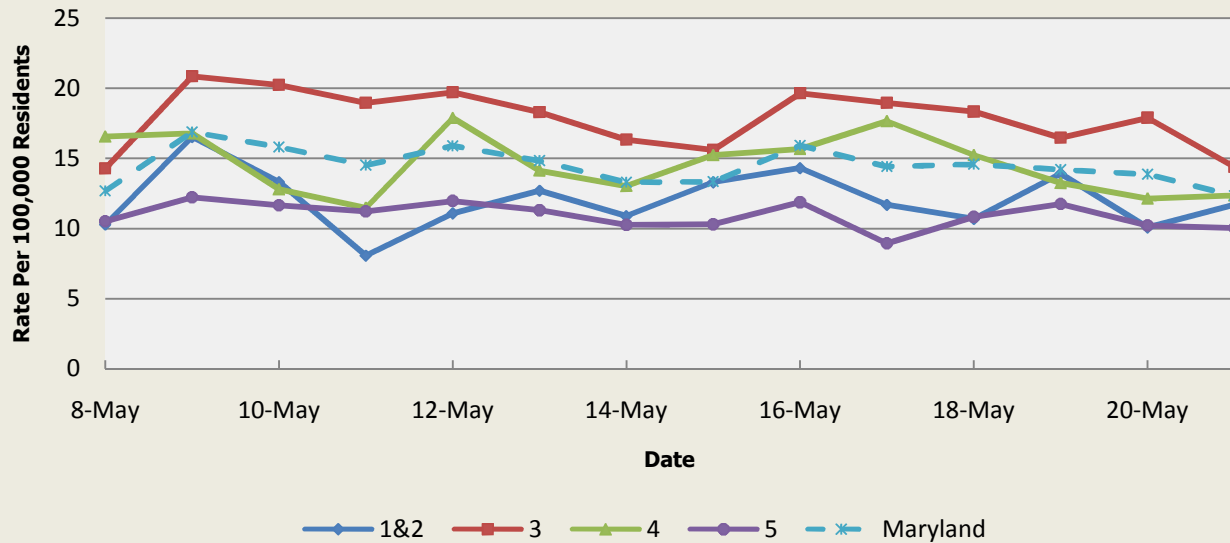


There were four (4) gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis in a Nursing Home (Region 3); 1 outbreak of gastroenteritis associated with a School (Region 3); 1 outbreak of gastroenteritis associated with a Daycare Center (Region 5); 1 gastroenteritis/foodborne associated with a Restaurant (Region 5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	14.87	15.42	10.32	13.01
Median Rate*	12.70	14.47	14.80	10.17	12.75

* Per 100,000 Residents

Emergency Department Chief Complaints for Respiratory Syndrome Rate Per 100,000 Residents

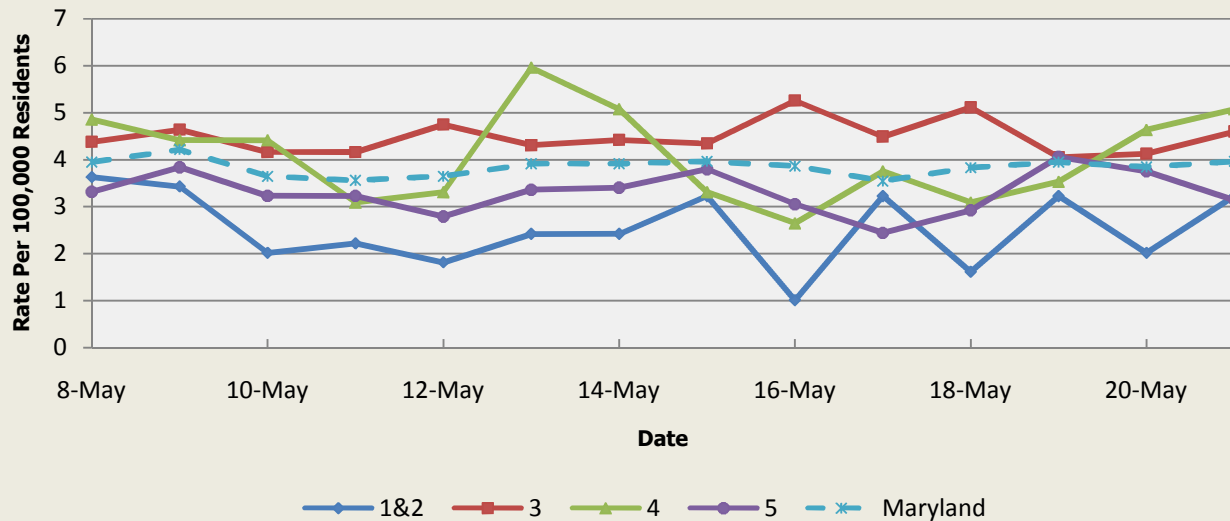


There were no respiratory illness outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.99	14.12	14.04	9.95	12.34
Median Rate*	11.70	13.37	13.69	9.52	11.78

* Per 100,000 Residents

Emergency Department Chief Complaints for Fever Syndrome Rate Per 100,000 Residents

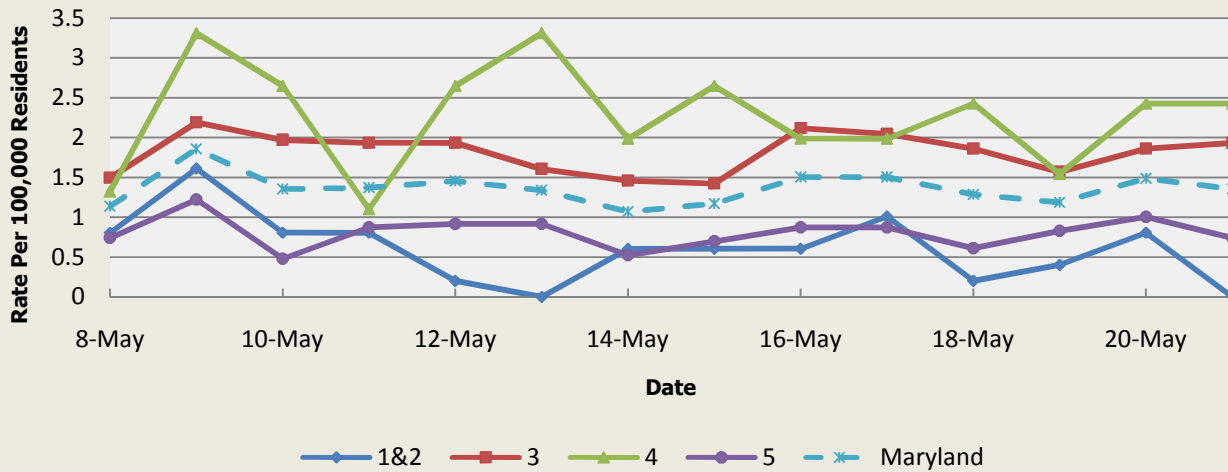


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.07	3.80	3.93	3.09	3.48
Median Rate*	3.02	3.62	3.75	2.97	3.35

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents

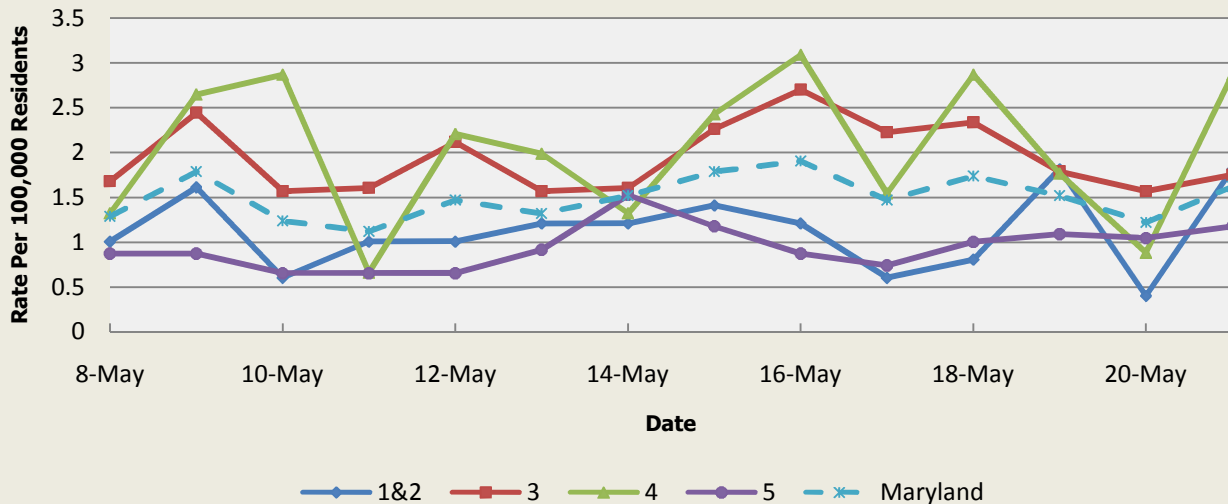


There were no localized lesion outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.07	1.91	2.03	0.98	1.49
Median Rate*	1.01	1.86	1.99	0.92	1.44

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

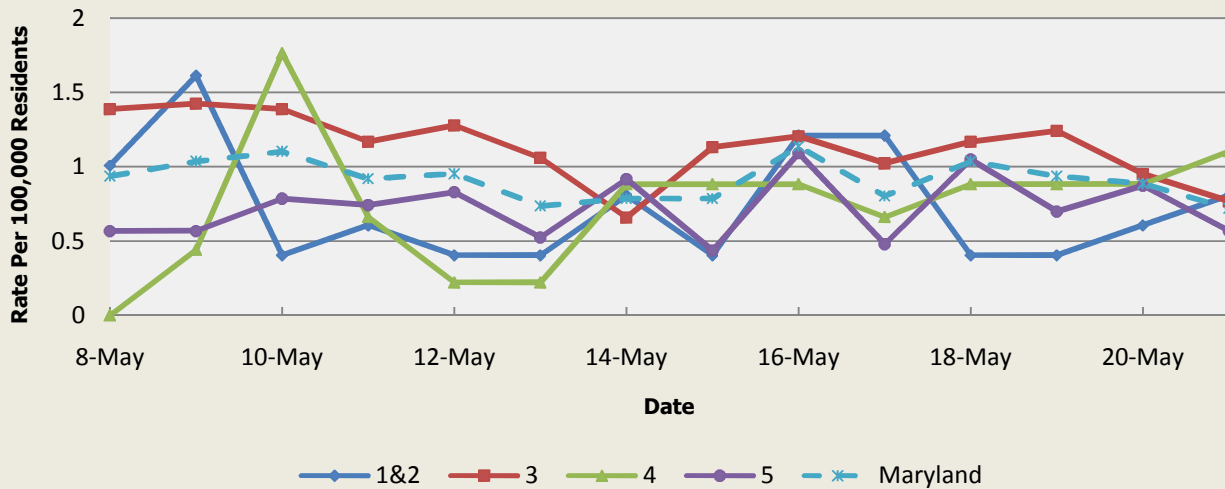


There was one (1) rash illness outbreak reported this week: 1 outbreak of Fifth Disease associated with a Daycare Center (Region 3).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.30	1.74	1.75	1.04	1.44
Median Rate*	1.21	1.68	1.77	1.00	1.39

* Per 100,000 Residents

Emergency Department Chief Complaints for Neurological Syndrome Rate Per 100,000 Residents



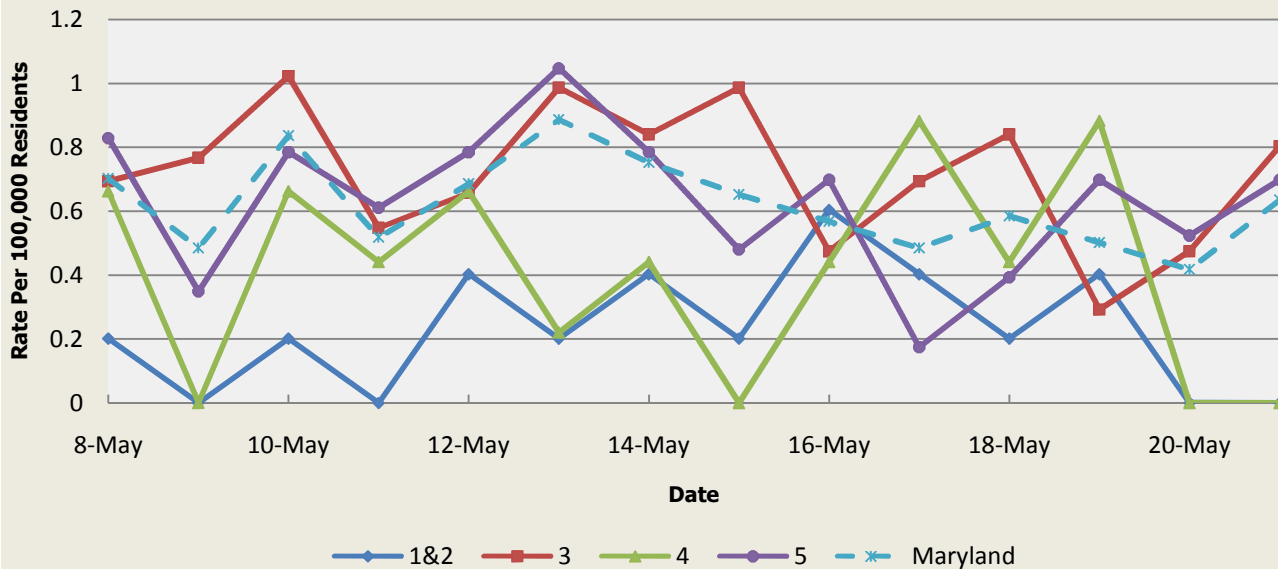
There were no neurological syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.73	0.65	0.48	0.62
Median Rate*	0.60	0.66	0.66	0.44	0.57

* Per 100,000 Residents

Emergency Department Chief Complaints for Severe Illness or Death Syndrome Rate Per 100,000 Residents



There were no severe illness or death outbreaks reported this week.

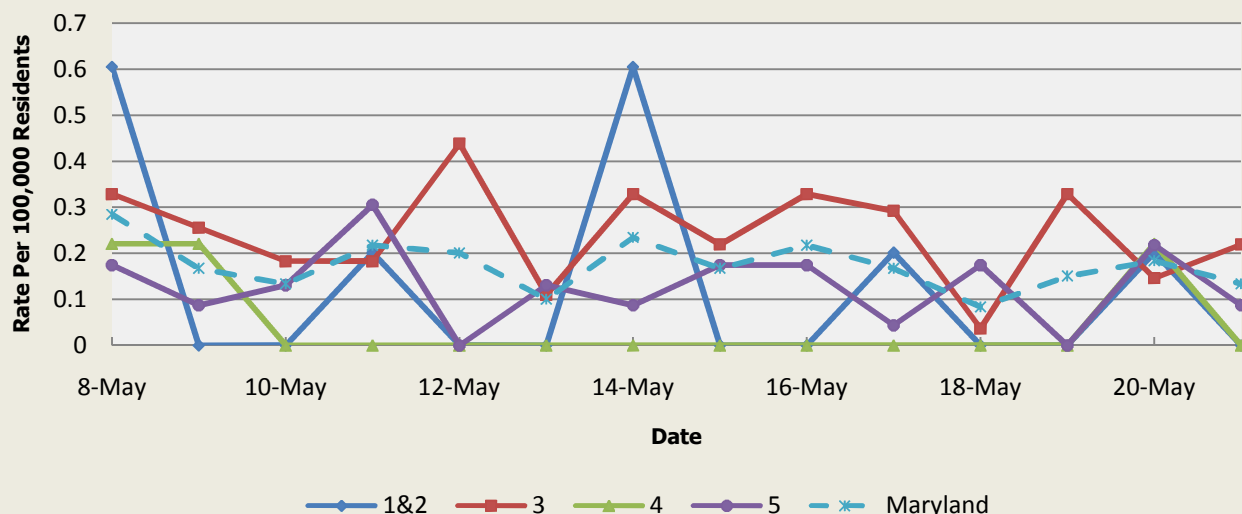
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.70	0.95	0.85	0.44	0.73
Median Rate*	0.60	0.91	0.88	0.44	0.72

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

**Emergency Department Chief Complaints for Botulism-like Syndrome
Rate Per 100,000 Residents**



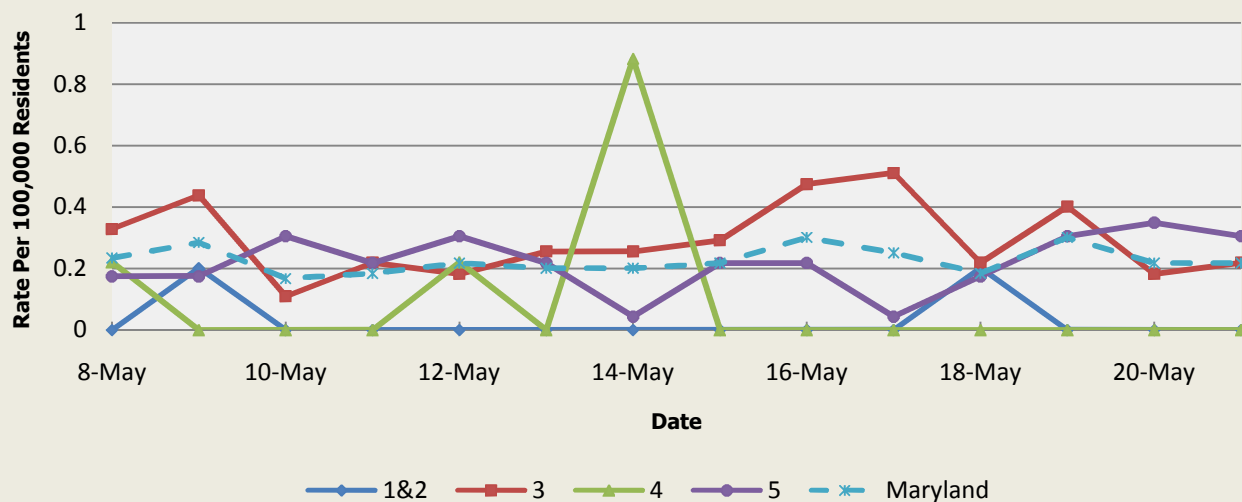
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 5/8 (Regions 1&2,3,4,5), 5/9 (Regions 3,4), 5/10 (Regions 3,5), 5/11 (Regions 1&2,3,5), 5/12 (Region 3), 5/13 (Region 5), 5/14 (Regions 1&2,3), 5/15 (Regions 3,5), 5/16 (Regions 3,5), 5/17 (Regions 1&2,3), 5/18 (Region 5), 5/19 (Region 3), 5/20 (Regions 1&2,4,5) and 5/21 (Region 3). These increases are not known to be associated with any outbreaks.

**Botulism-like Syndrome Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

**Emergency Department Chief Complaints for Hemorrhagic Illness Syndrome
Rate Per 100,000 Residents**



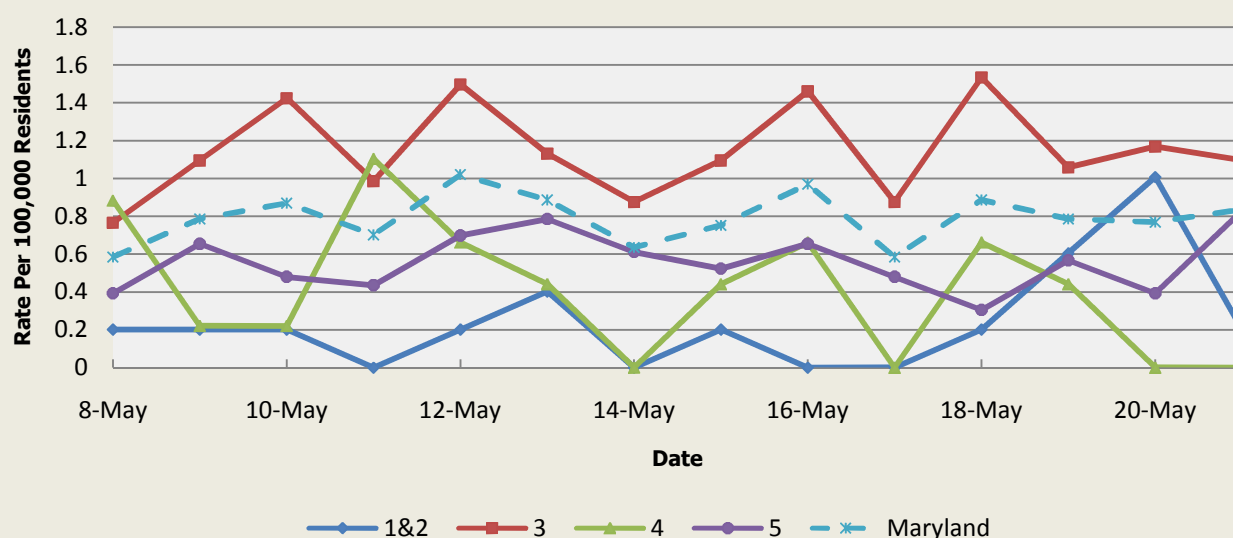
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 5/8 (Regions 3,4,5), 5/9 (Regions 1&2,3,5), 5/10 (Region 5), 5/11 (Regions 3,5), 5/12 (Regions 4,5), 5/13 (Regions 3,5), 5/14 (Regions 3,4), 5/15 (Regions 3,5), 5/16 (Regions 3,5), 5/17 (Region 3), 5/18 (Regions 1&2,3,5), 5/19 (Regions 3,5), 5/20 (Region 5) and 5/21 (Regions 3,5). These increases are not known to be associated with any outbreaks.

**Hemorrhagic Illness Syndrome
Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.10	0.03	0.07	0.08
Median Rate*	0.00	0.04	0.00	0.04	0.03

* Per 100,000 Residents

Emergency Department Chief Complaints for Lymphadenitis Syndrome Rate Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 5/8 (Region 4), 5/9 (Regions 3,5), 5/10 (Region 3), 5/11 (Regions 3,4), 5/12 (Regions 3,5), 5/13 (Regions 3,5), 5/14 (Region 5), 5/15 (Region 3), 5/16 (Regions 3,5), 5/18 (Region 3), 5/19 (Region 3), 5/20 (Region 3) and 5/21 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.47	0.34	0.29	0.38
Median Rate*	0.20	0.37	0.22	0.26	0.32

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	April			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Aseptic meningitis	11	23.4	21	110	136.4	129
Meningococcal disease	0	0.4	0	2	4.2	4
Measles	0	0	0	2	2	0
Mumps	3	2.8	2	7	28.6	6
Rubella	0	0.4	0	1	1.2	1
Pertussis	8	14.2	17	70	96.4	101
Foodborne Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Salmonellosis	19	51.4	56	174	241.4	236
Shigellosis	2	11.4	7	39	68.4	74
Campylobacteriosis	17	37.6	35	209	196.4	197
Shiga toxin-producing Escherichia coli (STEC)	3	7.6	5	41	35.6	31
Listeriosis	0	1.2	2	3	3.8	4
Arboviral Diseases	2016	Mean*	Median*	2016	Mean*	Median*
West Nile Fever	0	0	0	0	0	0
Lyme Disease	46	89.6	93	267	332.6	323
Emerging Infectious Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Chikungunya	1	0.8	0	3	3.4	0
Dengue Fever	0	0.6	0	12	4.4	3
Zika Virus***	2	0	0	19	0.2	0
Other	2016	Mean*	Median*	2016	Mean*	Median*
Legionellosis	8	9.6	9	38	38	37

† Counts are subject to change

*Timeframe of 2011-2015

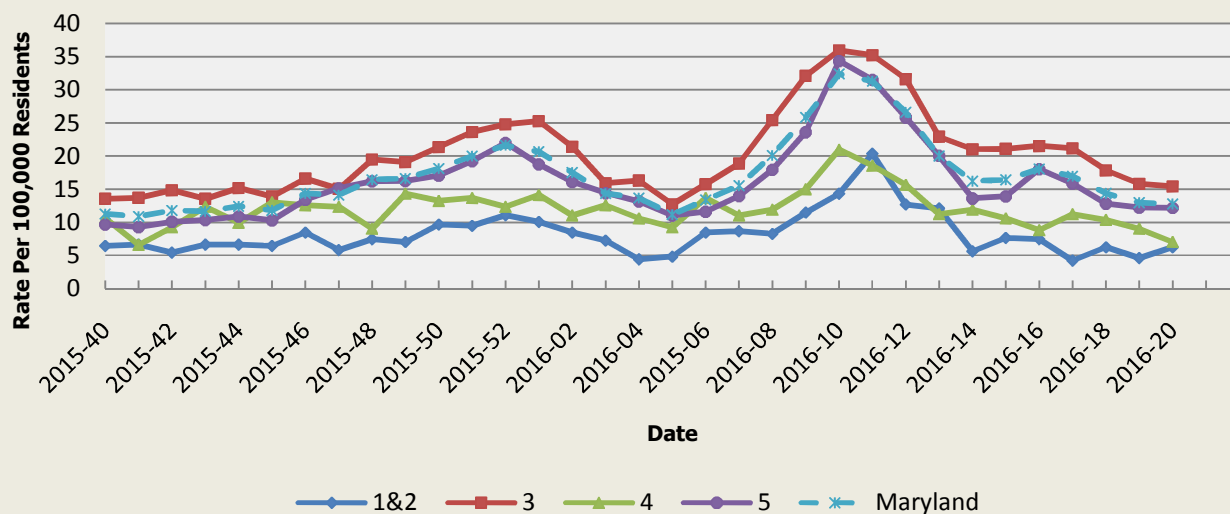
**Includes January through current month

***As of May 11, 2016, the total Maryland Confirmed Zika Virus Infections is 16.

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 20 was: Sporadic Geographic Spread with Minimal Intensity.

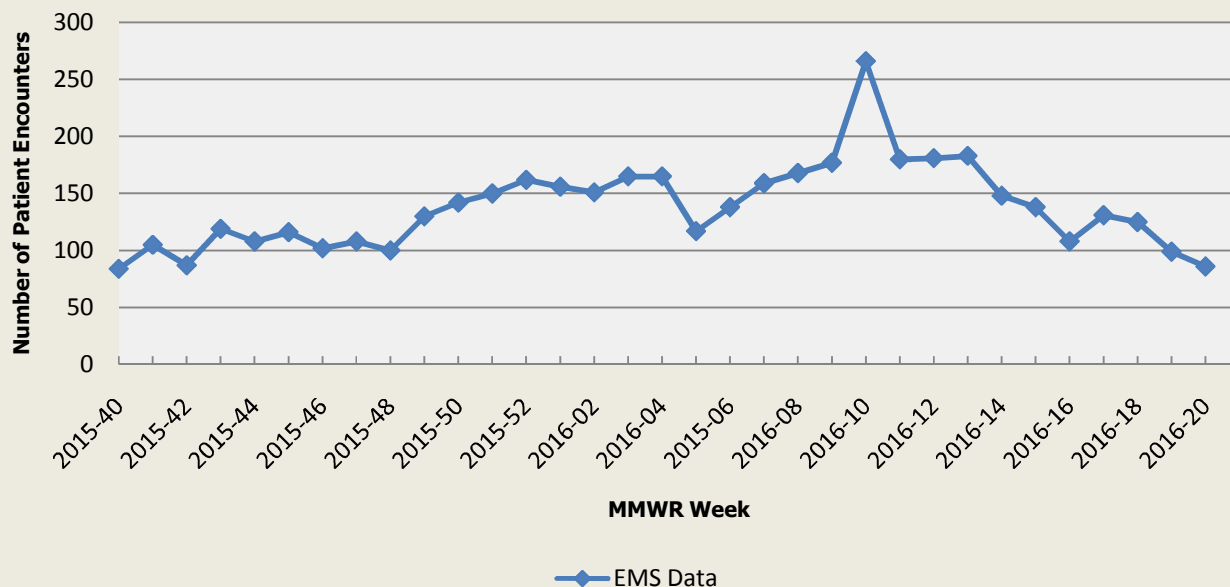
Emergency Department Chief Complaints for Influenza-like Illness
Rate Per 100,000 Residents



Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

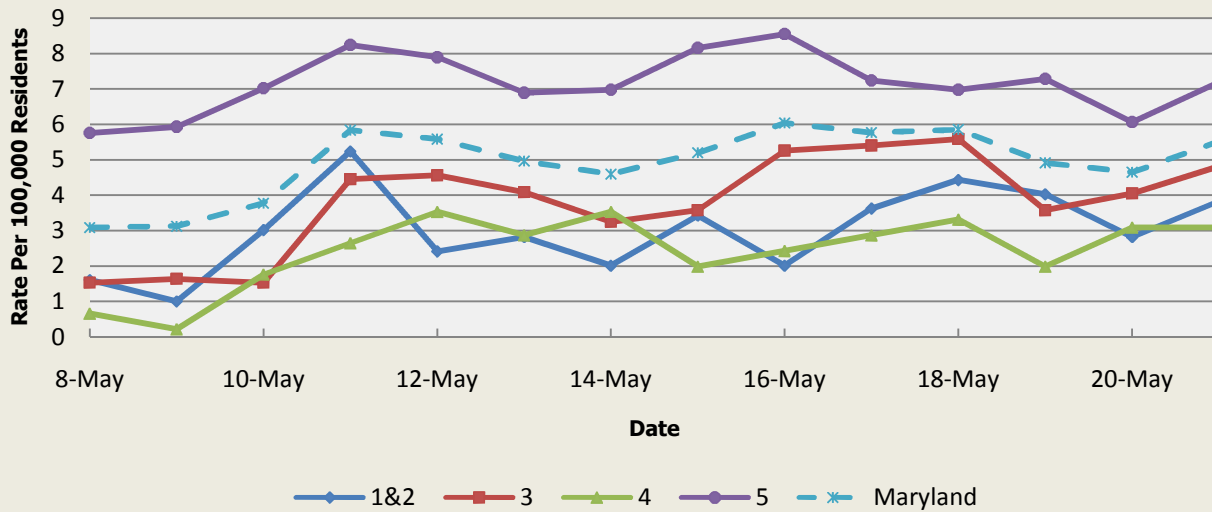
* Per 100,000 Residents

Emergency Medical Services Influenza Like Illness Contacts by Week
Source: eMEDS Patient Care Reports



Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.

Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

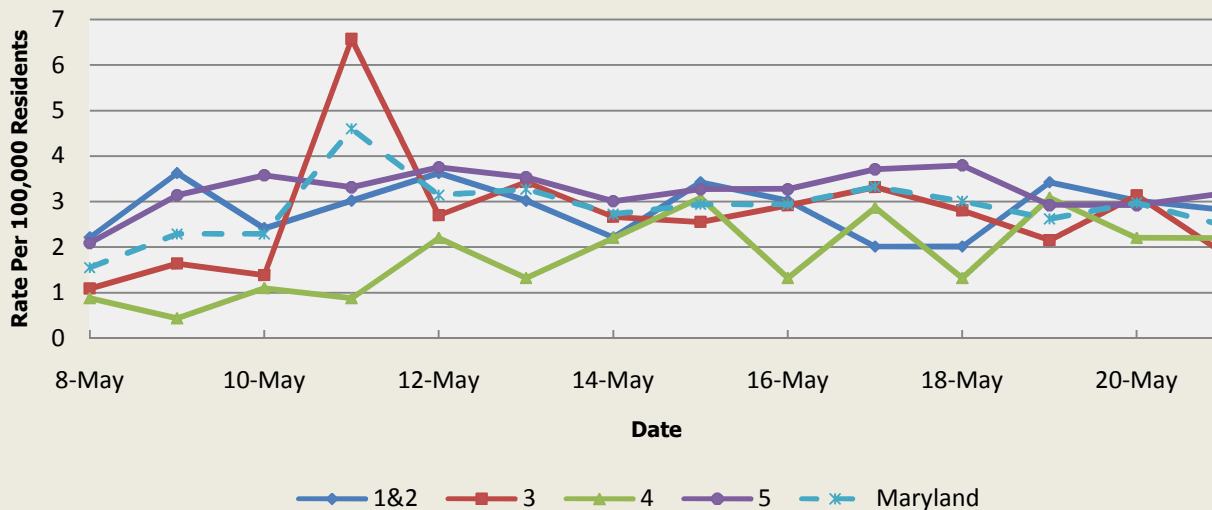


There were no increases above baseline for OTC flu.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.88	6.43	1.86	13.96	8.76
Median Rate*	3.02	5.30	1.55	11.35	7.13

* Per 100,000 Residents

Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



There were no increases above baseline for OTC thermometer.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	4.13	4.73	1.62	7.32	5.44
Median Rate*	3.63	4.35	1.55	6.68	4.97

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of May 9, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 850, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

H7N9 (CHINA): 18 May 2016, On 10 May 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of 11 additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus, including 4 deaths. Onset dates range from 23 Mar 2016 to 21 Apr 2016. The cases range in age from 23 to 69 years, with a median age of 52 years. Of these 11 cases, 7 (64 percent) are male. The majority (10 cases, 91 percent) reported exposure to live poultry, slaughtered poultry, or live poultry markets. One (1) case has a history of selling pork in a market. Read More: <http://www.promedmail.org/post/4228384>

H5N6 (CHINA): 23 May 2016, In this reporting period, 3 new human A(H5N6) virus infections were notified to WHO (table 1 [see the source URL above for all tables and figures]). These are the 1st human cases of A(H5N6) virus infection reported from Anhui and Hubei provinces. All 3 cases had exposure to live poultry or live poultry markets. A total of 14 laboratory-confirmed cases of human infection with avian influenza A(H5N6) virus, including 6 deaths, have been detected in China since 2014. Read More: <http://www.promedmail.org/post/4239090>

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

Avian Influenza in Poultry:

H5N1 (CAMBODIA): 18 May 2016, The 1st outbreak of H5N1 this year [2016] was confirmed in Kampot province on [10 May 2016], health officials said yesterday [Mon 16 May 2016]. A total of 349 chickens, one duck, and 37 chicken eggs, belonging to 7 families in Chhouk district's Koh Russei village, were culled and burned by health officials to prevent the virus from spreading further, said Chan Rith, provincial agriculture department director. Read More: <http://www.promedmail.org/post/4229595>

NATIONAL DISEASE REPORTS

SPOTTED FEVER (ARIZONA): 22 May 2016, The [Arizona] State Department of Health Services says a tick-borne disease similar to Rocky Mountain spotted fever has been identified in Arizona. The department says the cases involve 2 people bitten by ticks in mountainous areas of southern Arizona. Read More: <http://www.promedmail.org/post/4237407>

LEAD, WATER (NEW YORK): 25 May 2016, Following the Flint, Michigan lead contamination crisis, more than a half-dozen school districts on Long Island, NY have tested positive for elevated lead levels in water from drinking fountains and sinks. Few schools had thought to test their water until Newark, NJ school officials announced in March 2016 that they had found high levels of lead in drinking water. Read More: <http://www.promedmail.org/post/4245596>

INTERNATIONAL DISEASE REPORTS

ANTHRAX (BANGLADESH): 18 May 2016, A total of 5 more anthrax infected patients have been identified in Koira Soratol village under Ullapara upazila of Sirajganj district, bringing the number of such patients in the village to 45 in the last 2 days [16-17 May 2016]. 40 people had been identified as having anthrax infection on Monday [16 May 2016]. The number may increase as many people have reportedly come in contact with infected animals or contaminated meat, health officials say. Read More: <http://www.promedmail.org/post/4230232>

VIBRIO SPECIES GASTROENTERITIS (NEPAL): 22 May 2016, Vibrio species (non-cholerae) continue to be detected but randomly among patients with gastroenteritis at Sukraraj Tropical and Infectious Disease hospital, though there is no sign of an outbreak of gastroenteritis (only sporadic) in Kathmandu. Read More: <http://www.promedmail.org/post/4242624>

HUMAN ENTEROVIRUS (SPAIN): 23 May 2016, An outbreak of an enterovirus that can cause severe illness has already affected 60 children in Catalonia, according to the most recent figures released by the regional health department. Of these, 29 were hospitalized after suffering a form of encephalitis, which causes inflammation of the brain stem and cerebellum. Health authorities said most of the children are recovering well, although 2 remain in a serious condition. Read More: <http://www.promedmail.org/post/4242904>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: <http://phpa.dhmm.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmm.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

